

# GEO Certified® Independent Verification Report



**Golf Facility: Royal Porthcawl Golf Club**

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## Executive Summary

This report is the outcome of an on-site visit and assessment on 24th January 2019 at Royal Porthcawl Golf Club and an evaluation of the club's online application for certification through the GEO OnCourse® platform.

Staff present during the visit included Ian Kinley, Course Manager, John Edwards, Assistant Secretary, Peter Evans, Head Professional and Golf Club Members (2).

Royal Porthcawl Golf club is located in Wales, UK, east of Swansea and west of Cardiff and borders the Bristol Channel, and offers a coastal setting and special views across the Bristol Channel.

The Club is a private members club and high-quality tournament golf facility that comprises 64 hectares (ha) of land, 18 holes, 7,068 yards, traditional links golf course, and pro-shop, practice areas, halfway house, clubhouse and maintenance facilities.

The Club has hosted many international golf tournaments. Including the Amateur Championship on six occasions the most recent being in 2016, the British Senior Championship in 2014 and 2017, and the Walker Cup in 1995. The course is named as one of the Top 100 worldwide.

## Nature

Royal Porthcawl displays very good knowledge and awareness of its responsibilities concerning environmental stewardship on the golf course and the course management team clearly does a first-rate job protecting, conserving and naturalising the landscape.

Only 12 ha (18.75%) of the total site area is intensively managed and so most is left as natural habitat for plants and animals in support of biodiversity. The course especially provides valuable coastal grasslands that are important nesting and

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breeding areas for protected species of national and international importance, such as, meadow pipit, linnet, kestrel and yellow hammer.

The Club consults with the 'Sports Turf Research Institute' (STRI) regarding natural habitat on the golf course. The Club has a noteworthy 5yr 'Habitat Management Plan', which is about to be updated. The biggest project to come from this was the large-scale removal of gorse which successfully reinstated open sandy areas and encouraged significant coastal heather regeneration. Records of the flora and fauna are also recorded in this plan, such as skylarks, which are an endangered species to the UK.

The Club also consults annually with the 'Amphibian and Reptile Conservation Trust' (ARC), which led to the creation and restoration of natural habitats for European Protected Species, such as the Great Crested Newt. This work involved the removal of encroached willows, reeds and the re-profiling of ponds. Two additional ponds were also built in out-of-play areas, to reduce the risk of pollution and better connect golf course habitats. In addition, the Club has created two microhabitats on the golf course - a 'bug hotel' and 'reptile hibernacula', created from reusing on-site materials that help to support better waste management.

The Club's conservation efforts and ecological value of the golf course are communicated in periodic newsletters to its members.

The Club is keen to better record, monitor and support animal and plant species on the course (with the assistance of local wildlife groups, such as the Welsh RSPB) and strengthen its sustainability communication to stakeholders (employees, members, visitors, businesses, government and local community) by means of social media, the Internet, posters and notices.

Course management staff generally understands and practices the importance of minimal chemical intervention and reducing the risk of pollution on the course.

Considerations in optimal turfgrass selection (for the greens, tees, fairways and maintained rough) include drought, disease and winter stress tolerant grass species, such as fescues. Fertiliser applications are based on temperature, sunlight hours and rainfall figures (from an on-site weather station and local weather forecasts) and agronomic consultancy targets. Soil cores are bi-annually tested for soil pH (i.e. 5.5-5.7) and COSHH and LERAP codes of practice are followed.

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Cultural practices to maintain plant health and playing quality with minimal chemical use include the use of wetting agents, periodic blade sharpening (3 times/year), fescue over-seeding, solid tine aeration, occasional rolling and sand topdressing (e.g. 430 tonnes pa on the greens).

Practices to effectively manage pests and diseases include daily scouting the course to identify and monitor pest pressure.

Actions to prevent pests and disease include frequently washing machinery to a set management plan and there are shoe and club washing station for golfers.

Steps taken to reduce the risk of pollution on the golf course and grounds include emergency chemical spill procedures, retention of buffer and no-spray zones next to water bodies and hand weeding whenever possible.

Considerations in the appropriate selection and application of pesticides include products specific to weed, pest and disease and toxicity rating.

Concerns when applying pesticides include ensuring that staff are qualified to use pesticides (i.e. NPTC certified, PA1 and PA6 trained) and IPM techniques, spot treatment and residual product(s) are disposed on untreated playing areas.

Factors for the timing of pesticide applications include the developmental state/life cycle of the pest/disease, legal requirements, and bird breeding and pollinators.

Steps taken to reduce the risk of pollution in the maintenance facility include an impermeable surface, machinery wash station and closed-loop recycling system, and washdown water is discharged to mains sewer under a formal discharge agreement.

Practices to ensure that all hazardous substances are stored and used in a manner that minimise the risk of spillages include storage of hazardous substances in a metal building on an impermeable floor and there is an emergency wash down area and hazardous substances register.

As well, fuel storage tanks and fire extinguishers are legislatively compliant and yearly inspected, and greens staff are qualified in the effective use of spill containment kits. An 'Environmental Report Procedure' is apparent in order to deal with accidents or near misses and potential reoccurrences.

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The Club evidently recognises its responsibilities on waste management and green waste disposal. Hazardous waste such as waste oils, oil filters, aerosols, batteries and chemical containers are disposed of in a legally correct manner (i.e. 'Greensman'). Grass clippings are collected in a composting facility and used for divot mix and the construction of tees and greens and surplus material (i.e. circa 120 tonnes pa) is donated to other local golf clubs as rootzone material.

The Club is keen to make further progress in this area. Including the consideration of an 'Anaerobic Digester' (an innovative and potentially beneficially method of disposing of organic waste and producing beneficial by-products at the Club). Updating its 'Course Policy Document' and washdown area in line with current environmental regulations and 'best practice'. Exploring drone technology to better manage pest disease. Investigating a reedbed filtration system in order to manage wastewater.

## Resources

The golf facility uses potable water. In 2017, the golf course and maintenance facility and clubhouse used 8,233 and 4,578 cubic metres of water, respectively. Thus far, no water audits have been conducted to identify water inefficiencies and potential cost savings.

The Club has conducted a borehole investigation. However, it drew unsuitable saline water for irrigation purposes. As a result, the Club intends to install a reservoir in the next 3 years with the likely support of the ARC trust. The proposed location is near existing ponds that could provide breeding opportunities for priority species, common toad and grass snake, in Local Biodiversity Action Plans.

Several steps have been taken to reduce water consumption on the golf course. Indigenous grass species are selected such as fescues, as they tolerate additional weather stress, which reduces irrigation frequency and irrigation is targeted to essential playing surfaces only.

Factors for optimal irrigation scheduling includes the recent installation of a modern, irrigation system, which tracks and graphically displays water consumption, by area and time, to determine irregularities (i.e. 'Toro Links System'). As well, there is a soil sensor (i.e. 'Toro, Precision Soil Sensor'), which works with irrigation control systems

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and effectively prevents overwatering. Also, an on-site weather station provides data on wind speed and temperature.



Practices to ensure efficient water application include the use of wetting agents, regular servicing and upgrading of the irrigation system to maximise efficiency, irrigation audit (that highlighted inefficiencies that have since been dealt with) and adjustable, optimal located, sprinklers targeting in-play areas only.

Irrigation volumes are also based on wind speed, temperature and rainfall. Superficial irrigation techniques are used to replace soil moisture lost via evapotranspiration and rainfall. Night time computerised irrigation avoids evapotranspiration losses.

A closed-loop 'ClearWater' system is used to washdown machinery which recycles, cleans and re-uses the water, thus reducing public water consumption.

Water-saving practices in the clubhouse include encouraging water-saving practices amongst staff and visitors and the use of efficient appliances, such as dishwashers.

The maintenance facility is currently being renovated and water saving measures and best practice will be adopted, as and where practical.

Several initiatives are planned or being investigated to further reduce and conserve water. Including using compressed air machinery to reduce the use of potable water at the maintenance facility. Progressive installation of water saving infrastructure throughout e.g. maintenance facility renovation. Conducting twice-yearly water audits. Increasing environmental communication to employees, members and visitors to raise awareness, understanding and support on the Club's sustainability commitments.

The Club's main sources of energy are gas and electricity. Thus far, no renewable energy is used at the golf facility. The Club, however, is keen to explore the possible installation of solar panels on the maintenance facility, which is undergoing renovation.

In 2017, the golf facility used diesel (2,000 litres), gas (29,000 cubic metres), electricity (190,000 kWh), and petrol (3,243 litres). Electricity consumption fell by 5% on the previous year.

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The clubhouse and office mostly use halogen and fluorescent lighting. Investments in energy saving technology, such as Passive Infrared (PIR) occupancy sensors have been installed in toilets and there is the progressive installation of LED lighting in the golf facility and electronic newsletters and double-sided printing is practised to reduce paper consumption.

The clubhouse design makes very good use of natural lighting via large double-glazed windows, utilising natural light which reduces the need for artificial lights, conserves heat, saves money and lowers the facility's overall carbon footprint.

The maintenance facility's machinery mostly uses diesel and petrol, with the exception of two electric buggies.

Several measures are being explored/planned to improve the Club's energy performance, including twice yearly energy audits, green supply tariff, installation of outside motion sensors, zoned heating system in the clubhouse, voltage optimiser, seasonal adjustment heating system, progressively switching to hybrid or electric vehicles and LED lighting, and heightening communication on energy conservation commitments to stakeholders (e.g. employees, members, visitors and suppliers) in order to raise awareness.

The Club recognises its responsibilities on waste management and supports the 'waste management hierarchy', where practical and cost-effective.

The clubhouse is compliant with UK waste legislation. There is a colour coded bin system for the collection of general waste and dry mixed recycling. Also, cooking oil and drums are recycled and a local scrapyards collect scrap metals.

The Club has an informal rather than formal sustainable procurement policy. For example, purchasing in large quantities when possible to avoid excess packaging and reduce purchasing miles. Organises menus to include local seasonal produce. Users local producers/suppliers (e.g. local butchers) and purchases organic and certified products (e.g. 'Marine Stewardship Council Certified') and fish is sourced from inshore/line caught, day bought businesses. These practices reduce the Club's food miles and carbon footprint and support the local economy.

The maintenance facility also purchases in bulk where possible and selects reused and recycled materials, such as recycled rubber and stones. As well, it has an

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established local supplier network. Pallets were also reused for the creation of microhabitats on the golf course, as mentioned. The Club also donates equipment no longer required for re-use.

The Club is investigating, proposing and instigating a range of measures to improve its waste management at the facility, including:

- Reinstating a water fountain on the golf course, which will reduce the number of plastic waste bottles and provide branding opportunities on reusable flasks.
- Exploring the purchase of biodegradable and compostable coffee cups, which could be added to the composting system for divot mix and root-zone material.
- Progressing bulk buying of materials to reduce associated transports emissions.
- Investigating electric hand dryers, over paper towels in the toilets, as they are considered to be more environmentally friendly.
- Exploring the possibility of having waste food collected by a local contractor for feed in farms and/or energy generation.
- Investigating if food waste (i.e. fruit, vegetables and egg shells) could be added to the Club's existing compost pile.
- Developing and implementing a more formal sustainable procurement policy.
- Conducting periodic waste audits.
- Improving the Club's recycling points at the golf facility.

### Community

Royal Porthcawl is an internationally renowned tournament golf facility and as such it makes a significant positive contribution to the local and national economy, such as local hotels and restaurants and health and well-being.

The Club has 750 members including male (91%), female (6%) and juniors (3%) and has recently embarked on an 'outreach programme' to address the above-mentioned imbalance. For example, a 'female golfer mentoring scheme' was introduced that resulted in 20 new female members and the Club also has a 'discounted membership' scheme for the younger golfers to encourage more juniors.

The Club practices equal opportunity monitoring across staff and club members. In order to support under-representative groups and avoid discrimination. Men and women and a junior committee are represented in the Club's committee.

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The clubhouse is accessible to people with limited mobility and mobility equipment, such as electric buggies, are available to golfers with medical conditions. The Club is also exploring the possibility of installing lifts in the clubhouse.

The Club as well provides a 'Cycle to Work Scheme', which is currently taken up by two employees. The Club offers work experience on the golf course, kitchens and administration office and student internships.

The Club consults with environmental consultants, such as 'Sports Turf Research Institute' and 'ARC' and local government agencies on sustainability issues.

The Club as well works well to support local charities. For example, by making an annual donation of £6,000 to selected charities, such as a local care home and Lifeguard Club of Porthcawl, and vouchers to the value of £20,000 and £48,000 to local community groups.

The Club is keen to improve its environmental communication to all of its stakeholders. To this end, it is inviting a representative from the 'Dune to Dune Project' on the golf course to give a presentation on the environmental benefits of this work. It is also investigating the opportunity to collaborate with local environment groups (e.g. Welsh Wildlife and RSPB Wales) to conduct ecological surveys and ecology walks on the golf course. In addition, the Club is planning to update its social media, website, newsletters and notices to include information on 'Sustainable Golf', the Club's 'Sustainability Commitments and Policies' and achievements such as 'GEO Certified®', in order to raise awareness and understanding and gain stakeholder support.

### Conclusion

The Royal Porthcawl Golf Club is a high quality, internationally known golf club with very good management practices for environmental stewardship on the golf course, while displaying a real commitment to progress its sustainability performance throughout natural land management, resource efficiency, pollution control measures, communications, and local social and community involvement.

I, Dino Minoli, independent accredited verifier, recommend that Royal Porthcawl Golf Club be awarded the GEO Certified® ecolabel for its progress on sustainable golf including its very good protection, conservation and creation of natural habitat on the golf course.